

REMARKS

Applicants wish to thank the Examiner for the consideration given the present application. The Examiner's Office Action dated **May 3, 2000** has been received and its contents carefully noted. Filed concurrently herewith is a *Request for a One (1) Month Extension of Time* that extends the shortened statutory period for response to **September 3, 2000**. Accordingly, Applicants respectfully submit that this response is timely filed.

Claims 73-144 were pending in the present application prior to the above amendment. Due to the above actions, claims 76, 87, 93, 99, 105, 111, 117, 123 and 129 have been amended. Accordingly, claims 73-144 are now pending in the present application, and, for the reasons set forth below, are believed to be in proper condition for allowance.

Initially, on page 2 of the Office Action, claims 73-144 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Zhang* (U.S. Patents No. 5,614,733, or 5,604,360, or 5,563,426) in view of *Yamazaki* (U.S. Patent No. 5,543,636). Applicants respectfully traverse these rejections for the following reasons and favorable consideration is requested in view thereof.

First, it should be noted that three criteria must be met to establish a prima facie case of obviousness. *M.P.E.P.* §2143. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings to achieve the claimed invention. *Id.* Second, there must be a reasonable expectation of success. *In re Rhinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976). Third, the prior art must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).


Applicants respectfully contend that the Office Action has failed to set forth a case of a *prima facie* case of obviousness since the combination fails to teach, disclose or reasonably suggest the claimed invention. The claimed invention is related to a thin film transistor comprising, *inter alia*, a crystalline semiconductor film including carbon and nitrogen at a concentration not higher than $5 \times 10^{18} \text{ cm}^{-3}$, and oxygen at a concentration not higher than $5 \times 10^{19} \text{ cm}^{-3}$. The claimed thin film transistor further includes a crystalline semiconductor film without a grain boundary while having hydrogen or a halogen for neutralizing a point defect in the crystalline semiconductor film. Applicants respectfully submit that neither *Zhang* nor *Yamazaki*, alone or in any reasonable combination thereof, teaches, discloses or reasonably suggests the aforementioned claim limitations. Accordingly, the claimed crystalline semiconductor film is patentably distinctive from conventional amorphous semiconductor films, conventional single crystalline semiconductor films and conventional polycrystalline semiconductor films.

Further, on page 2 of the Office Action, claims 123 and 129 were rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctively claim the subject matter which applicant regards as his invention. In particular, the Office Action states that there lacks a definition of "S" value in the claims. Applicants respectfully direct the Examiner's attention to Fig. 5 of the detailed drawings, which provides support for the S values recited in independent claims 123 and 129. In view thereof, withdrawal of the rejection is respectfully solicited.

In view of the foregoing, all of the claims in this case are believed to be in condition for allowance. Should the Examiner deem that any further action by the Applicants would be desirable to place this application in even better condition for allowance, he is requested to contact the undersigned.

Respectfully submitted,

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